

ABSTRACT

A submount that enables the reliable mounting of a semiconductor light-emitting device on it, and a semiconductor unit incorporating the submount. A submount 3 comprises (a) a substrate 4; and (b) a solder layer 8 formed on the top surface 4f of the substrate 4. The solder layer 8 before melting has a surface roughness, Ra, of at most $0.18\ \mu\text{m}$. It is more desirable that the solder layer 8 before melting have a surface roughness, Ra, of at most $0.15\ \mu\text{m}$, yet more desirably at most $0.10\ \mu\text{m}$. A semiconductor unit 1 comprises the submount 3 and a laser diode 2 mounted on the solder layer 8 of the submount 3.